



**PIZZUTO-CLAYTON PLACE,
PROPOSED MINOR SUBDIVISION**

**MERRIAM MOUNTAINS AREA
SAN DIEGO COUNTY, CALIFORNIA
TPM 20846
Log No. 04-08-030
APN: 178-100-07**

BIOLOGICAL ASSESSMENT

UTM: 11-S: 486,482mE; 3,673,276mN


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The County of San Diego

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PSBS #U407

October 14, 2008


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SUMMARY OF FINDINGS

This revised report responds to the County of San Diego comments dated August 31, 2007 and January 7, 2007 and October 2, 2008 and a Habitat Loss Permit (HLP) Batching Meetings held on 4/20/06 and 8/16/07, and meetings with Planning Department staff as of November 29, 2006. The project has been redesigned to reflect minor changes in the grading plan and (earlier), to accommodate the revised fuel management zones and consolidates the biological open space easement outside the fuel management zones. Pacific Southwest Biological Services, Inc., (Pacific Southwest) staff biologists conducted a biological assessment on a 41.14-acre site (site) proposed for a minor subdivision into three residential parcels. Within the proposed subdivision (parallel to the western boundary), the project would accommodate a road/utility easement for adjacent TM 5381. Additionally, approximately 0.14 ac of Diegan Coastal Sage Scrub would be impacted by improvements along the project's access road (Deer Springs Place) to Deer Springs Road.

The site is located in the northern portion of the Merriam Mountains in north-central San Diego County north of the city of Escondido, and northwest of the intersection of Deer Springs Road and U. S. Interstate 15 (see Figures 1 and 2). Surveys were performed to document the site's biological resources with special focus on assessing biological resources and/or sensitive species that would be impacted by proposed project. The surveys identified four vegetation/habitat types occurring on the proposed project site: Disturbed Habitat, Urban/Developed, Diegan Coastal Sage Scrub and Granitic Southern Mixed Chaparral (Figure 3). Additional habitats, including Eucalyptus Woodland, Intensive Agriculture, and Scrub Oak Woodland occur off-site and have the potential to be impacted by project implementation. Project implementation would impact 1.04 acres of Diegan Coastal Sage Scrub and 29.80 acres of Granitic Southern Mixed Chaparral. Mitigation measures are recommended to reduce these impacts to less than significant effects under the California Environmental Quality Act (CEQA).

Three individual Summer Holly (*Comarostaphylos diversifolia* ssp. *diversifolia*) plants, a sensitive but not listed plant species, were observed on-site. The Diegan Coastal Sage Scrub located on-site does not have the potential to support the federally threatened Coastal California Gnatcatcher [Gnatcatcher] (*Polioptila californica californica*) because of its small size (1.20 acres, including the off-site area) and isolation from other stands of the same vegetation. Neither jurisdictional drainages nor wetlands occur on the property.

INTRODUCTION

PURPOSE OF THE STUDY

Pacific Southwest Biological Services, Inc. (Pacific Southwest), at the request of the project engineer, BHA, Inc., conducted zoological and botanical surveys on the 41.14-acre site and the off-site access road proposed for expansion. The purpose of these surveys was to identify and quantify the biological resources, with special attention to any sensitive biological resources occurring on the proposed project site and identify potential impacts from the proposed project. This report summarizes the results of the surveys and includes an impact analysis of both potential on-site and off-site impacts from the proposed project and recommends measures to avoid, minimize, or mitigate potentially significant impacts to biological resources. It is anticipated that the information herein will be available for public agency review.

PROJECT DESCRIPTION

The proposed project is a minor subdivision of 41.14 acres into three parcels, with required roads, utilities, and other improvements, including an off-site road improvement area of approximately 0.14 acre. Note that one of the requested easements on the map is a proposed road/utility easement in favor of TM 5381, associated with the Merriam Mountains project to the north and west. This road/utility easement is treated as a project impact in the impact analysis (see below). A Limited Building Zone (LBZ) easement of 100 feet or greater surrounds the proposed pads is based on a draft Fire Protection Plan (dated August 15, 2006, see Figure 4 of this report), prepared by FireWise 2000. A biological open space easement to protect biological resources totaling 7.92 acres is proposed for the project. The open space easement on parcel 3 (7.92 acres) would fall south of the improved portion of Clayton Place on-site, but be connected by an approximately 200-ft wide linkage to an extensive area of chaparral off site, along the slope facing Deer Springs Road (see additional discussion, below).

The project design has been revised to maximize the functional open space easement area in Parcel 3, the area with the greatest continuity with native habitats offsite; this easement includes 0.16 acre of Diegan Coastal Sage Scrub, 7.43 acres of Southern Mixed Chaparral, 0.13 acre of Disturbed Habitat and 0.20 acre of Urban Developed land. Habitat within the proposed biological open space easement on parcel 3 would be considered “impact neutral,” meaning that it would be not counted as impact or as mitigation. A minor revision to the design of parcel 1 modifies the building pad and fuel clearing easement so that two of three Summer Holly plants would likely be impacted (see below). Additionally, the revised design appears to indicate that portions of a proposed brow ditch appear to be within the biological open space easement; this is merely a graphic representation of the drainage; no improvements would be within the biological open space easement.

The proposed project would include off-site road improvements of Deer Springs Place, a private road. Off-site road improvements would occur from Deer Springs Road to the southern boundary of the site. This road is currently 22 feet wide from the intersection of Deer Springs Road to a distance of approximately 900 feet. The remainder of the road is 10-feet wide. All of the road improvement would occur within the existing 60-foot road easement (Figure 3). The project proposes 24 feet of paving with a 6-inch AC berm along a 28-foot graded section, within a 60-foot private road easement. No fuel modification is proposed along the off-site portion of

the road (see Figure 4). Generally, the off-site road improvements would occur on the east side of the existing road, where the majority of the existing habitats are non-native (Eucalyptus Grove, Urban Developed lands). A small area of Diegan Coastal Sage Scrub near the northern portion of the off-site road would be disturbed by grading; these impacts have been included in the impact calculations for various vegetation types.

PROJECT LOCATION

The site is located in the Merriam Mountains area north of the city of Escondido, north-central San Diego County, California (Figure 1). The map location is in Section 24, Township 11 South, Range 3 West, of the San Bernardino Base and Meridian of the USGS 7.5' San Marcos, California quadrangle (UTM: 11-S: 486,482mE; 3,673,276mN) (Figure 2). Access to the project site is from U. S. Interstate Highway 15 (I-15) is west on Deer Springs Road, then north on Deer Springs Place. This road eventually runs through the property, entering at the southern end of the site.

SURVEY METHODS, LIMITATIONS AND DEFINITIONS

METHODS

Prior to the field surveys, a search was made of the California Department of Fish and Game's (CDFG) California Natural Diversity Data Base (CNDDB) for the USGS 7.5' San Marcos, Valley Center, Bonsall and Pala California quadrangles. This search revealed several federally-or state-listed or otherwise sensitive species reported from the quadrangles (Appendices 3 and 4). Pacific Southwest also reviewed a U.S. Geological Survey aerial photograph (1995) for potential drainage patterns and extent of vegetation cover.

Pacific Southwest staff biologist Jason H. Kurnow conducted the zoological survey of the site 15 April 2004. Methods consisted of walking slowly over the entire site while watching and listening for wildlife, and observing indirect wildlife signs. "Pishing," a technique commonly used to attract the interest of passerines and draw them into view, was occasionally employed. Indirect indicators of presence such as scat, tracks, burrows, and diggings supplemented direct observations. Binoculars (8.5x44) were used to assist in the detection and identification of wildlife. Vegetation types were evaluated in which proximity to suitable habitat was considered. Directed searches were made for species identified by the CNDDB as potentially occurring on the site.

Pacific Southwest principle botanist Mitchel Beauchamp performed the botanical survey and vegetation mapping of the site on 18 April 2004. The on-foot survey covered all slope aspects, soil types, vegetation types and drainages. Each plant observed was identified and recorded. An additional field search for sensitive plants occurred on 22 July 2005. A topographic map (1 inch = 100 feet) of the site was used to aid in mapping the vegetation communities located on-site. Directed searches were made for species identified by the CNDDB as potentially occurring on the site.

Pacific Southwest staff biologists Jason Kurnow and Douglas Allen visited the site 15 November 2005. The purpose of this visit was to investigate the area where off-site road

improvements would occur. Other project aspects were also examined. Table 1 summarizes the field survey conditions. Photographs of the site were taken (Attachment 1).

Table 1. Summary of Zoological and Botanical Field Survey Conditions

Date	Personnel	Survey Type	Time	Conditions
4/15/04	Jason H. Kurnow	Zoological	0730-1030	Start: 59°F 100% CC, calm End: 65°F 0% CC, calm
4/18/04	Mitchel Beauchamp	Botanical	NR	NR
7/22/05	C. W. Bouscaren	Botanical	0615-0930	NR
11/15/05	Jason H. Kurnow Douglas W. Allen	Reconnaissance	0800-1015	NR

As a result of previous review by County staff, a draft Fire Protection Plan was prepared by FireWise 2000 (August 15, 2006, as revised, see Figure 4 of this report), which proposed site-specific fuel modification zones for each proposed home site and are shown on the TPM 20846 RPL 3. The proposed open space easement is outside the limited building zone surrounding the home site on parcel 3.

Survey Limitations

Complete biological inventories of sites often require a large number of field hours during different seasons, as well as nocturnal sampling for some animal groups such as small mammals. Depending on the season during which the field visit is conducted, amphibians, snakes, many mammals, owls and other nocturnal birds, and annual plants are groups that can be difficult to inventory. Many groups of vertebrates are difficult to find during short-term field surveys. Some, such as migratory or nomadic birds, may be absent from the site while the fieldwork is being conducted. Other species occur at low densities and may easily have been missed. Species that are declining or have naturally patchy distribution may not be present in areas of what appears to be suitable habitat. However, through literature review, study of museum records, and knowledge of the habitat requirements and distribution patterns of individual species, the probability of a given species being present on a site can often be quite accurately predicted.

DEFINITIONS

Vegetation Communities

Vegetation habitats or communities are assemblages of plant species that usually coexist in the same area. The classification of vegetation communities is based upon the life form of the dominant species within the community and the associated flora. The nomenclature for vegetation communities is as follows Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986), as modified by Oberbauer (1996).

Wildlife Habitats

Wildlife habitats differ from vegetation communities in that a wildlife habitat may contain several vegetation communities that are similar in structure but different in the plant species composition, location and soil substrate. This distinction becomes an important factor when assessing the sensitivity of a particular wildlife habitat. In addition, the interaction of

various wildlife species occurs between many different wildlife habitats. This becomes more evident where these habitats overlap in areas known as ecotones. These ecotones support a combination of species from two or more adjoining habitats that generally increases the number and diversity of species within these areas. Wildlife habitats encountered on the project site approximate the vegetation communities discussed below.

Species Nomenclature

The scientific nomenclature used in this report is from the following standard references: vascular plants (Beauchamp 1986, Hickman 1993); vegetation communities (Holland 1986, Oberbauer 1996); wildlife habitats (Mayer *et al.* 1988); amphibians and reptiles (Crother 2000) birds (American Ornithologists' Union 1998); and mammals (Jameson and Peeters 1988).

SURVEY RESULTS

PHYSICAL CHARACTERISTICS OF THE SITE

The site is square-shaped and is bordered by an avocado grove to the east. Residential areas partially border the site to the south and west. Granitic Southern Mixed Chaparral borders the remainder of the site. A paved road enters the site from the south, exiting to the east. A large hill encompasses most of the area to the west of this road. Slopes associated with this hill are steep and relatively rocky. Slopes are located to the east of this road too. These slopes are not as rocky and as steep as those located west of the road.

The geology of the project site is mapped as Mesozoic Granitic Rocks, and Pre-Cretaceous Metamorphic Rocks (Jenkins 1973). Soils occurring on the site are characterized as Visalia Sandy Loam and Cienega-Fallbrook Rocky Sandy Loams (Bowman 1973). Elevation range varies between approximately 875-1198 feet above mean sea level.

ON-SITE AND SURROUNDING LAND USES (BIOLOGICAL CONTEXT)

The site has been disturbed in the past by the construction of an access road through the saddle area to serve the subject property and the property to the east, which supports an active avocado grove. The southwestern corner of the site has been cleared to the lower perimeter road and appears to be used by the adjacent property owners for grazing. Minor areas on the interior of the property, particularly on the summits and prominent ridge to the southeast, have been cleared for access to percolation tests. A western perimeter road, which has an aging asphalt surface, runs along the property perimeter and onto the northern parcel.

Slopes located on-site are part of the southwestern extent of Merriam Mountain. This mountain is relatively free of development and encompasses a relatively large area. Animal movement has the potential to occur between the open areas on-site and other portions of Merriam Mountain.

JURISDICTIONAL DRAINAGES AND/OR WATERS OF THE UNITED STATES

The field assessment revealed that neither jurisdictional drainages nor wetlands occur on-site, based on U. S. Army Corps of Engineers or the California Fish and Game Code definitions.

BOTANICAL RESOURCES

Vegetation Communities

Four vegetation type/habitat communities occur on-site: Diegan Coastal Sage Scrub, Granitic Southern Mixed Chaparral, Disturbed Habitat and Urban/Developed (Figure 3). Descriptions of the communities, the Holland Element Code Numbers (#), and approximate extents follow.

Disturbed Habitat (#11300) (1.09 acres)

A western perimeter road, which has an aging asphalt surface, runs along the property perimeter and onto the northern parcel. Additionally, there is a cleared area adjacent to the on-site access road, towards its northern extent. Within this area, two mobile homes are present.

Urban/Developed (#12000) (1.76 acres)

This land cover includes both the access road and landscaping associated with the residences located to the south and west of the property.

Diegan Coastal Sage Scrub (#32500) (1.20 acres; 0.14 acre off-site)

Two areas of Sage Scrub occur on the south-facing slopes of the site where soil and exposure preclude the dominance of chaparral. A third area is located adjacent to the existing access road at the southern end of the site. The vegetation demonstrates low species diversity, being mostly Coastal Sagebrush (*Artemisia californica*).

Granitic Southern Mixed Chaparral (#37121) (37.23 acres)

A mixture, based upon the dominance of Chamise (*Adenostoma fasciculatum*), Mission Manzanita (*Xylococcus bicolor*) and Rock-rose (*Helianthemum scoparium*). On north-facing slopes, Scrub Oaks (*Quercus berberidifolia* and *Q. wislizenii*) are more frequent. Generally the chaparral is impenetrable except for trails and roadways.

This vegetation community includes the dirt trails used for access to percolation test areas, and the percolation test areas. This is because these areas do not appear to be maintained and native vegetation is present within them.

Five vegetation type/habitat communities occur along the off-site portion of Dear Springs Place access road for the proposed project (Figure 3); descriptions of the communities and approximate extents follow. Holland Element Code Numbers (#) are given to all communities, with the exception of Scrub Oak Woodland, as it is not described in Holland.

Eucalyptus Woodland (#11100) (N. A.)

A large stand of Eucalyptus occurs at the southeastern portion of Deer Springs Place (a private paved road). A portion of this woodland would be impacted by project implementation. Additionally, a linear stand of Eucalyptus parallels this road and a separate stand occurs on either side of it.

Urban/Developed (#12000) (N. A.)

Approximately 1200 linear feet of Deer Springs Place occur within the area where off-site improvements are proposed. A few residences also occur in this area.

Intensive Agriculture (#18200) (N. A.)

A nursery is located at the southwestern portion of the road improvement area. Just north of the nursery is a stand of ornamental eucalyptus.

Scrub Oak Woodland (N.A.)

A stand comprised solely of Scrub Oak (*Quercus berberidifolia*) is located between the Intensive Agriculture and Urban/Developed areas occurring on the west side of Deer Springs Place. No other oak species, Diegan Coastal Sage Scrub species, or chaparral species were noted around the Scrub Oaks. The understory vegetation was primarily non-native grass.

Flora

The observed flora of the site involves 102 plant taxa of which 29 (28%) are non-native. A complete list of plants observed or detected on the site is included in Appendix 1. These Non-native plants are associated with the roadway adjacent to the eastern avocado grove as well as the cleared area in the upper saddle and southwest corner. The native component of the flora is representative of the Granitic Southern Mixed Chaparral conditions found in the undeveloped areas to the adjacent north. With the rather limited extent of habitat types on the subject property, the total of 102 indicates a rich floristic mix for the chaparral. The interior San Diego County floral relationships of the site are revealed by the presence of Eastwood Manzanita (*Arctostaphylos glandulosa* ssp. *zacensis*).

Rare, Threatened, Endangered, Endemic and/or Special-Status Plant Species

The CNDDDB search revealed sensitive plant species reported from the USGS 7.5' San Marcos, Valley Center, Bonsall and Pala California, California quadrangles. Appendix 3 lists these plants, their conservation status, their typical habitat requirements, and probability for occurrence on the project site.

Summer-Holly was observed within the property boundary. This species is a federal Species of Special Concern (declining or at risk but not a listed species) and is on the CNPS List 1B (plants rare, threatened, or endangered in California and elsewhere), with a R-E-D rating of 2-2-2 (Distributed in a limited number of occurrences, occasionally more if each occurrence is small; Endangered in a portion of its range; and Rare outside of California.). This species is on the County Group-A rare plant species list. Resor (unpub: <http://sandiego.sierraclub.org>) indicates the species occurs mainly west of Interstate 15 in San Diego County, although it ranges from southern Orange County to northern Baja California, Mexico. Resor further indicates that the plant exhibits populations of up to 1,000 shrubs on Double Peak in San Marcos. Beauchamp (1986) indicates this species occurs in the San Marcos Mountains, Mount Whitney, Rancho Santa Fe, Encinitas, Mount Soledad, Peñasquitos Canyon, Del Mar Heights, Iron Mountain, the canyons of Mission Valley, Jamul Valley, and Otay Mountain; the species is found over much of coastal San Diego County. Mr. Beauchamp also indicates (pers. comm.) that the plant also occurs in similar habitats within the 2,300+ acre Merriam Mountain ownership to the north.

Three areas (loci) of individual shrubs occur in portions of chaparral vegetation on the site (Figure 3). Two loci of plants fall within the Limited Building Zone (fuel management zone) of parcel 2, with two loci within the proposed pad grading for parcel 1. The three individual plants found on the site do not represent a biologically-significant population of the species necessary to protect because of the small number of plants on the site, the presence and preservation of larger numbers of the species in the Merriam Mountains and because these plants are not likely to provide unique genetic material to the larger population (they are near the center and not the edges of its range-wide distribution).

Another sensitive plant species, San Diego Sunflower (*Viguiera laciniata*), was initially thought to occur on the site, but upon closer examination, this individual was determined to be Slender Sunflower (*Helianthus gracilentus*), which commonly occurs on the site.

Sensitive Vegetation Communities Observed On Site

Diegan Coastal Sage Scrub is found within the property's boundary, with three small areas totaling approximately 1.34 acres of this community on the south and west facing slopes of the site. This community is considered sensitive because of historic loss from the European settlement period to present time in southern California and the concordant high numbers of sensitive plants and animals the community typically supports. Coastal Sage Scrub is an uncommon plant community in inland north San Diego County. Mapping for the North County MSCP subarea plan (San Diego County 2008) indicates that the majority of the Merriam Mountains are covered with chaparral vegetation. County mapping shows scattered small areas of coastal sage scrub along the I-15 freeway between SR-78 and SR-76, with the largest patches in the south, near Jesmond Dene, east of I-15. Other scattered patches of coastal sage scrub exist on the east side of the Merriam Mountains, east of I-15. Within the Merriam Mountains proposed subdivision are small patches of coastal sage scrub at the north end of Mesa Rock Road and south of Lawrence Welk Lane. Additionally, there are limited patches of sage scrub in the San Marcos Mountains. The Pizzuto site's Southern Mixed Chaparral is not considered sensitive because it occurs on soils derived from granitic rocks and not mafic intrusive rocks, a rarer chaparral type that often supports locally endemic plants.

ZOOLOGICAL RESOURCES

Fauna

Twenty-four animal species were detected on the property during the survey. These included one reptile, nineteen bird species and two mammals. A complete list of animals observed or detected on the site is included in Appendix 2. All of the fauna observed or expected on the site are typical of their associated communities occurring in Southern California. Pacific Southwest conducted no small mammal or pit fall trapping on the property; nor is it deemed necessary, based on the fauna expected to occur on the site.

Butterflies

Two common butterflies, the Common White (*Pontia protodice*) and Acmon Blue (*Icaricia acmon*) were observed on-site.

Reptiles

One common reptile, the Western Fence Lizard (*Sceloporus occidentalis*) was observed on-site.

Birds

Those species observed included such common and widespread species such as the Common Raven (*Corvus corax*), House Finch (*Carpodacus mexicanus*) and Northern Mockingbird (*Mimus polyglottos*). Other species located on site such as the California Quail (*Callipepla californica*) and Blue-gray Gnatcatcher (*Polioptila caeruleus*), have more specific habitat requirements, but are common within the appropriate habitat types. Three raptor species, the Red-tailed Hawk (*Buteo jamaicensis*), Red-shouldered Hawk (*Buteo lineatus*) and Cooper's Hawk (*Accipiter cooperii*) were observed from the site. No nests were observed on-site.

Mammals

Five mammal species were detected during the survey. These included the Cottontail (*Sylvilagus* sp.) and Ground Squirrel (*Spermophilus beecheyi*), San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*), Botta's Pocket Gopher (*Thomomys bottae*) and Coyote (*Canis latrans*). All these species are common and typical of the habitats found on the site.

Rare, Threatened, Endangered, Endemic and/or Sensitive Animal Species

The CNDDDB search revealed sensitive animal species reported from the USGS 7.5' San Marcos, Valley Center, Bonsall and Pala California, California topographic quadrangles. Appendix 4 lists these animals, their conservation status, their typical habitat requirements, and probability for occurrence on the project site. Three of these species, including the Cooper's Hawk (County Group 1 Species), was observed during the survey. Although this species is considered a California Species of Special Concern, it is relatively common in a wide variety of non-desert habitats in San Diego County, including urban neighborhoods (Unitt 2004). The Red-shouldered Hawk (County Group 1 Species), another common species in San Diego County (Unitt 2004), was sighted from the project site. The San Diego Black-tailed Jackrabbit (County Group 2 Species), a species with a somewhat diminished distribution because of habitat conversion, but is still common in San Diego County, was also found on the site.

In addition, a few of the species not detected during the survey, but listed in the CNDDDB search for the above-referenced quadrangles have a low to moderate potential of occurring on-site. The Coastal California Gnatcatcher, a federal Threatened species, is known from north-central inland San Diego County, but is not expected on the site because of the small size of the DCSS patch on site. The species does not regularly occur in Granitic Southern Mixed Chaparral. Specific searches for this species did not reveal its presence.

BIOLOGICAL RESOURCE EVALUATION

REGIONAL CONTEXT

The site is located at the south-central portion of the Merriam Mountains. The northern half of the Merriam Mountains represents a largely undeveloped island of native habitats (mostly chaparral-dominated), which is mainly surrounded by "Urban/ Development" (actually rural residential and agricultural use) areas associated with unincorporated San Diego County. The

San Marcos Mountains are located adjacent to and the west of the Merriam Mountains. It is possible that avian species and other animal species could move between the Merriam Mountains and the undeveloped portions of the San Marcos Mountains. According to fire maps prepared by the California Division of Forestry, the site has not burned in over 100 years.

LOCAL CONTEXT

The project is located near the western terminus of a rocky ridge running east-west, from I-15 to the east, to a valley to the west (see Figure 4). Parallel and to the south of this ridge is Deer Springs Road, with scattered large residential lots taking access directly off of Deer Springs Road. An unnamed dirt road, running parallel to Deer Springs Road presently delimits the southern area with large lot residential uses from the steeper, northern native slopes. This open area of steep, chaparral-covered slopes above Deer Springs to a single family house, about half-way up the slope occupies about 72 acres east of the project. This area, combined with the majority of the eastern portion of the south-facing slope approaching I-15 amounts to about 44 acres. It is unlikely that this area will be developed in the future because of the steep slopes and extremely rocky terrain.

Immediately adjacent to east of the project site is a large single family house surrounded by extensive avocado grove plantings on the north and south sides of the ridge. The open space easement on proposed parcel 1 is connected to the approximately 72 acre block of chaparral located above Deer Springs Road. The link between the proposed open space easement and the larger chaparral area is approximately 200 ft wide, a substantial width that would probably allow for fairly free wildlife movement between the onsite open space and the larger, undeveloped offsite area to the southeast.

To the immediate west of the project site lies a proposed access road for the 2,327-acre Merriam Mountain Specific Plan, currently undergoing environmental review. This access road would either be adjacent or within the proposed Pizzuto subdivision, depending on the final design alternative determined by the County. The Pizzuto subdivision includes a road/utility easement within the subdivision which could be used by the Merriam project. The project area also includes additional existing utility easements in favor of water districts, power and telephone companies (see TPM map notes). Since these latter easements have already been granted to the respective easement holders, they are not under the control of the project proponents. It is not known if any of these easements would require under-grounding of utilities that would cause disruptions to the existing vegetation. The impact analysis included below assumes that no additional impacts would occur to these easement areas because of project implementation.

The existing vegetation within the Merriam ownership adjacent to the Pizzuto project site is Granitic Southern Mixed Chaparral, and is presently proposed as open space (OS) lot 13, approximately 234 acres in size. However, this open space area would be surrounded by residential development with fuel management zones and would have limited long-term biological viability.

The site is loosely surrounded by development to the west, south and east, lacks drainage channels, and contains steep slopes and dense vegetation.

Special Status Species

The three Summer Holly plants found on the site are not considered biologically significant because of the small size of the “population” found on site. The species is found with reasonable frequency in appropriate habitats in the nearby Merriam project (2,327 acres in size). However, because the species is on the County Group A plant list, loss of this species on site may be considered a significant impact under County policies.

The site contains Diegan Coastal Sage Scrub (DCSS), the primary habitat for the Coastal California Gnatcatcher. Pacific Southwest does not believe protocol surveys for this species is necessary because of low habitat quality, steep slopes, and isolation from other DCSS and minimal amount of DCSS located on site.

CUMULATIVE IMPACT ANALYSIS

Potential impacts to biological resources were examined for 68 projects in north-central San Diego County (the assessment area), based on the traffic analysis study performed for the Merriam Mountains (see Appendix 5). This analysis includes projects located in the City of San Marcos and the County of San Diego, including proposed and recently approved projects. Data regarding biological resources was not available for 18 of the 68 projects (27%), either because of incomplete application information, or lack of biological resource data in jurisdiction files. There is also no indication of the total size of each project, so no cumulative total of project sizes can be calculated. Appendix 5 lists the Project application number, a consecutive project number (unique to this table), major vegetation types (where stated), with stated impacts, and a note relating to the project.

The summary of proposed impacts to biological resources derived from Appendix 5 is shown Table 2.

Table 2. Summary of Assessment Area Cumulative Impacts to Biological Resources (Derived from Appendix 5)

Vegetation Type	Cumulative Impact (Ac)	Pizzuto Contribution
Eucalyptus Woodland	4.15	0.0
Disturbed	33.67	0.96 (<1%)
Urban/Developed	25.43	1.56 (0%)
Agriculture	72.38	0.0
Diegan Coastal Sage Scrub	239.66	1.04 (0.4%)
Chaparral	1065.00	29.8 (2.8%)
Non-native Grassland	84.95	0.0
Grassland (undefined)	0.01	0.0
Riparian (generalized)	2.27	0.0
Wetlands (undefined)	2.14	0.0
Coyote Bush Scrub	0.6	0.0
S. Willow Scrub	5.49	0.0
S. Oak Woodland	12.6	0.0
Oak (undefined)	22.49	0.0

Table 2 shows that the proposed project would contribute to approximately 0.4% of the cumulative loss of Diegan Sage Scrub and approximately 2.8% of the loss of chaparral habitats (other non-native habitats considered of limited biological value).

ANTICIPATED PROJECT IMPACTS TO BIOLOGICAL RESOURCES

DIRECT BIOLOGICAL RESOURCE IMPACTS

Vegetation/Habitat Impacts

The County will consider all portions of the site not located within an open space easement potentially impacted, with the exception of easements occurring on-site not associated and not impacted by the project.

Table 3. Site Habitats, Areas Existing, Impacted, Mitigation Ratio and Mitigation Needed (Area in Acres)

Habitat Type	Existing On-site	Impacted	Mitigation Ratio	Mitigation Needed
Disturbed Habitat	1.09	0.96	N. A.	N. A.
Urban/Developed	1.76	1.56	N. A.	N. A.
Diegan Coastal Sage Scrub ¹	1.20 (1.06+0.14)	1.04 (0.90+0.14)	2:1	2.08 (2x1.04)
Granitic S. Mixed Chaparral	37.23	29.80	0.5:1	14.9
TOTAL	41.28 (41.14+0.14)	33.36 (33.22+0.14)	--	--

¹Includes offsite improvements (0.14 ac)

1. Diegan Coastal Sage Scrub
The proposed project would directly impact 0.90 acre of this vegetation community onsite and an additional 0.14 acre off site (1.04 acres total). This impact is considered significant under CEQA.
2. Granitic Southern Mixed Chaparral
The proposed project would directly impact 29.8 acres of Granitic Southern Mixed Chaparral (GSMC) vegetation. This impact is considered significant under CEQA. Impacts to Disturbed Habitat and Urban/Developed Habitat are not considered significant under CEQA because of their relatively low biological diversity.
3. Summer Holly
Summer Holly is located at three locations (Figure 3) on the site. Each location has a single plant. All three plants are on the southern part of parcel 2 and within the graded area or the fuel management zone. The loss of this small population is not considered significant under CEQA.

Construction-related Impacts

4. Nesting Migratory Birds
If clearing and/or grading takes place during the spring/summer months, nesting birds may be impacted by direct destruction of nests, or indirectly by abandoning nesting sites due to direct impacts or noise. During the construction phase of the proposed project, there is the potential of increased noise (which may displace local wildlife) and fugitive dust during high winds.

INDIRECT IMPACTS**5. Secondary Wildlife Impacts**

Indirect and long-term impacts associated with the project would result from occupation of the area by human residents. Non-native meso-predators (dogs and cats) and/or exotic plant species will probably be introduced into the surrounding habitat. Increased human activity into the surrounding habitat is also anticipated. This could potentially degrade the habitat and disturb/kill native wildlife species.

Based on the proposed design, potential local “wildlife movement areas” to off-site locations to the east would still function. As the site is not a part of a linkage, or corridor, there are no significant impacts anticipated regarding wildlife movement after project implementation.

Increased lighting on the surrounding native habitat during normally crepuscular or night hours can provide nocturnal predators an advantage over their prey. This has a potential to reduce native wildlife in the surrounding area.

6. Potential Cumulative Biological Resource Impacts

Tables 2 and 3 of the cumulative analysis (Appendix 5), shows that the proposed project contributes less than 1.5 % of all impacts to native habitats within the cumulative assessment area; with the largest contribution to chaparral habitats at approximately 2.8% of the documented projects. Impacts to Diegan Coastal Sage Scrub from the project would contribute to less than 0.4% of all the cumulative impacts. The project would contribute to as much as 8% of the total amount of Urban/Developed lands, and lesser amounts to other non-native and low wildlife value Disturbed Habitat. The biological effects contributed by this project to the cumulative effects of projects in the assessment area are less-than-significant because of their small percentage and would require no additional mitigation beyond the recommended measures.

RECOMMENDED MITIGATION/MONITORING MEASURES**DIRECT IMPACTS**

Table 4 indicates the project existing vegetation communities, impacts, mitigation ratios, mitigation required, areas preserved on site, impact neutral, and off-site mitigation required.

Table 4. Habitat/Vegetation Communities, Impacts, Mitigation (area in acres)

Habitat/Vegetation Community	Existing ¹	Impacts ¹	Mitigation Ratio	Mitigation Required	Preserved On Site	Impact Neutral	Off-site Mitigation
Disturbed Habitat	1.09	0.96	NA	NA	NA	NA	NA
Urban/Developed	1.76	1.56	NA	NA	NA	NA	NA
Diegan Coastal Sage Scrub	1.20	1.04	2:1	2.08	NA	0.16	2.08
Granitic S. Mixed Chaparral	37.23	29.80	0.5:1	14.90	NA	7.43	14.90
TOTAL	41.28	33.36					

¹Includes off-site areas.

Vegetation/Habitat Impacts

1. Diegan Coastal Sage Scrub
 - a. The tentative parcel map shall be conditioned to require, to prior to any clearing, grubbing, grading, construction or any improvement plans, acquisition of 2.08 acres land and/or credits of Diegan Coastal Sage Scrub in a mitigation bank to the satisfaction of the Director of Planning.
 - b. Prior to approval of the final map, construct a fence at the northern and western boundaries of the open space easements on parcel 3, with a design to the satisfaction of the County of San Diego, generally consistent with the proposed Biological Open Space Fencing & Signing (Figure 5).
3. Granitic Southern Mixed Chaparral

The tentative parcel map shall be conditioned to require, prior to approval of any permit to clear, grub, grade or any other development activity, including the final parcel map that the applicant shall acquire land or credits equal to 14.9 acres of Granitic Mixed Chaparral in a mitigation bank to the satisfaction of the Director of Planning.

Construction Impacts

4. Nesting Migratory Birds

The project should be conditioned to prohibit clearing, grubbing, grading or construction activities between 15 February and 15 August, unless a survey by a qualified biologist prior to such activities demonstrates that no active migratory bird nests would be harmed by such activities. Generally, no construction activities should take place within 300 ft (non-raptors) or 500 ft (raptor species) of actively nesting birds. Any active nests would be flagged and that area protected from impacts until the birds have fledged.

The County may require controls to limit the potential effects of construction activities into surrounding native habitats; such controls may include temporary fencing, limited construction hours and runoff and dust control measures.

INDIRECT IMPACTS

No mitigation measures are recommended for indirect impacts.

CUMULATIVE IMPACTS

No mitigation measures are recommended for cumulative impacts.

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Figure 1. Project Vicinity, Pizzuto - Clayton Place,
Merriam Mountains Area of San Diego County - ★



Not to Scale

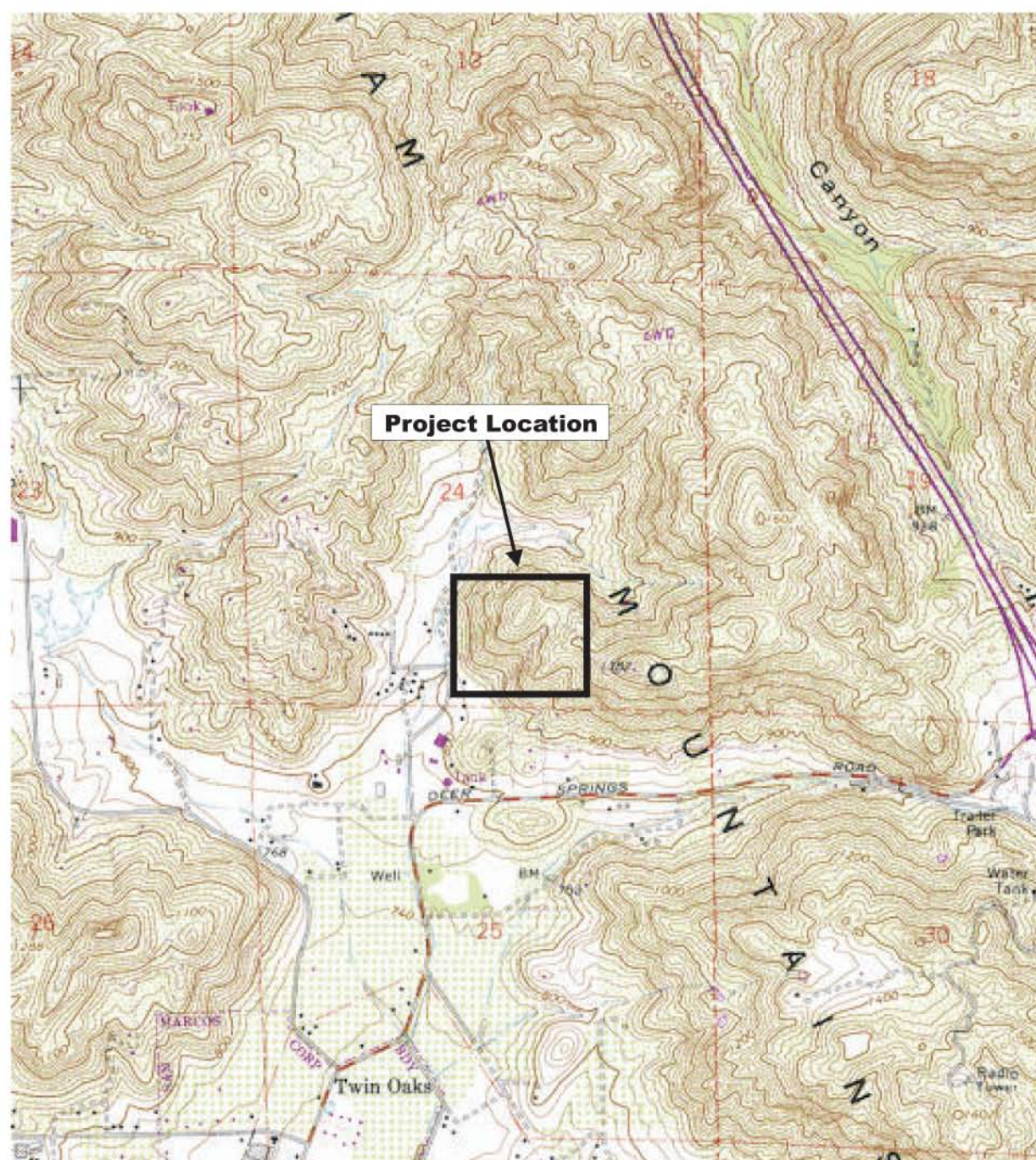


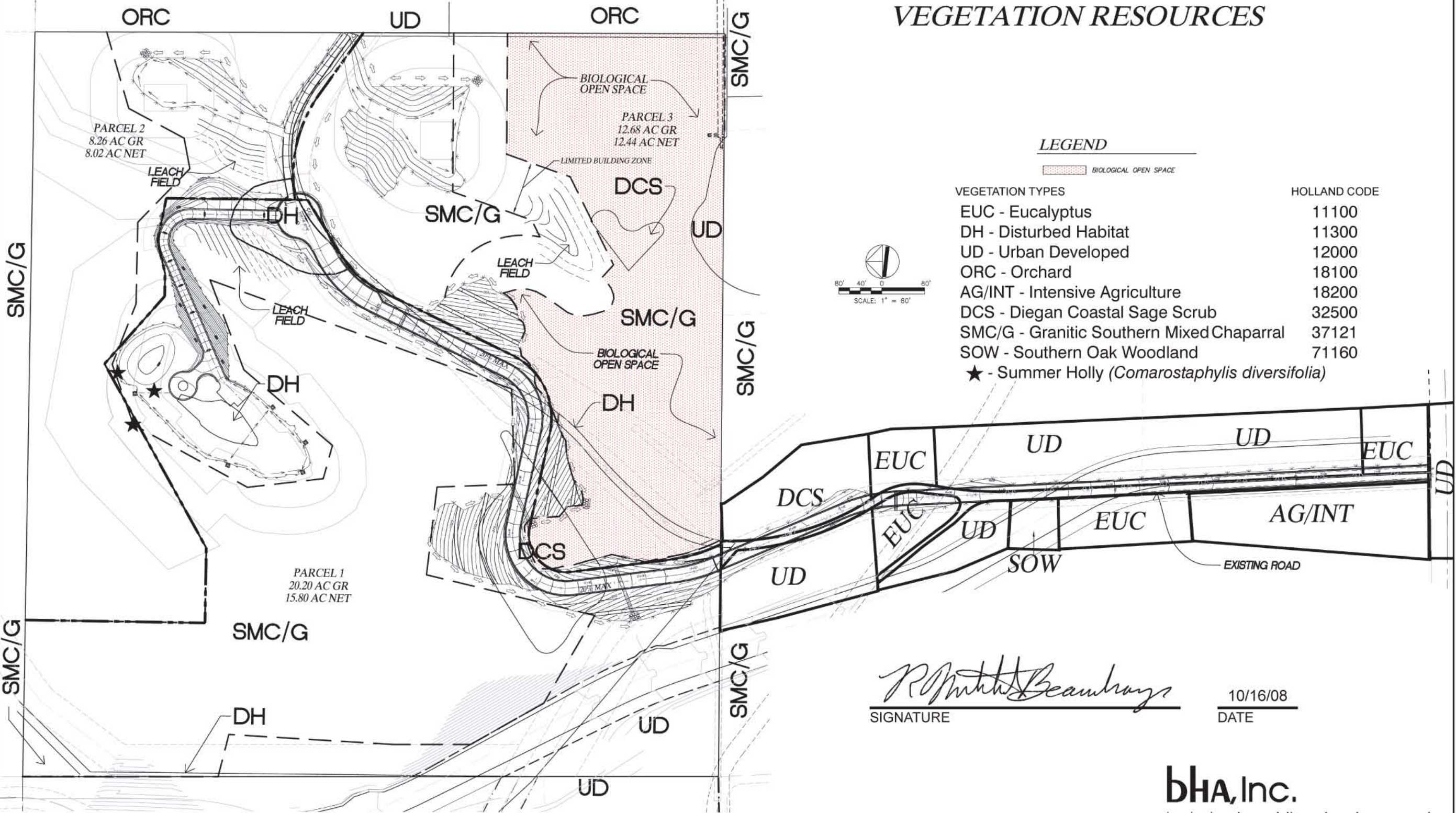
Figure 2. Project Location, Pizzuto - Clayton Place,
Merriam Mountains Area of San Diego County
USGS 7.5' San Marcos, CA Quadrangle



1" = 2,000'

Figure
3

T.P.M. NO. 20846 RPL #6
VEGETATION RESOURCES



R. M. H. Beaumont
SIGNATURE

10/16/08
DATE

bHA, Inc.
land planning, civil engineering, surveying
5115 Avenida Encinas
Suite L
Carlsbad, California 92008-4387
(760) 931-8700

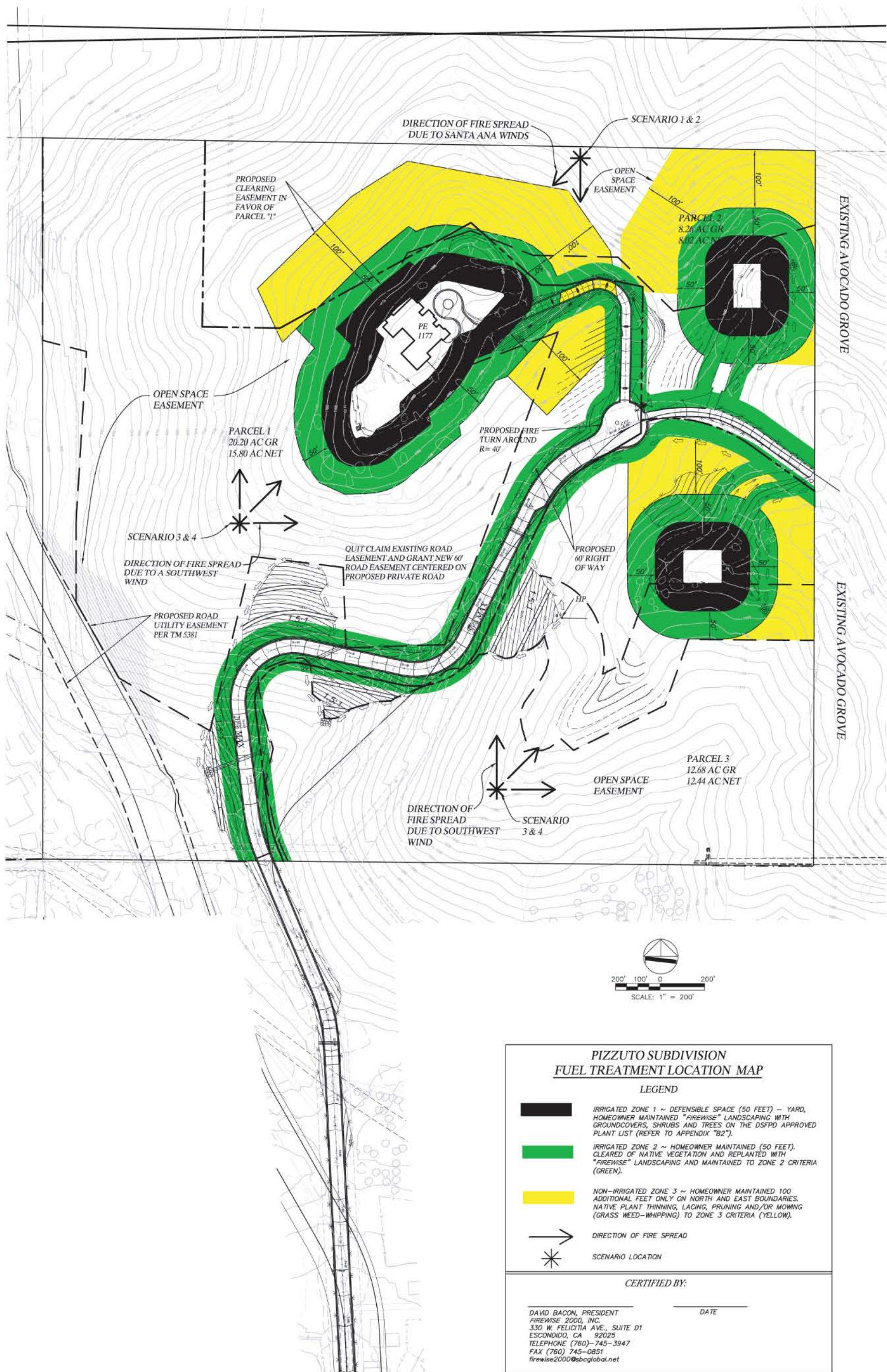


FIGURE 4. PIZZUTO - CLAYTON PLACE
T.P.M. NO. 20846 RPL #6
FUEL MODIFICATION PLAN

bHA, Inc.
land planning, civil engineering, surveying
5115 AVENIDA ENCINAS
SUITE "L"
CARLSBAD, CA. 92008-4387
(760) 931-8700

BIOLOGICAL OPEN SPACE FENCING & SIGNING

Figure
5

LEGEND

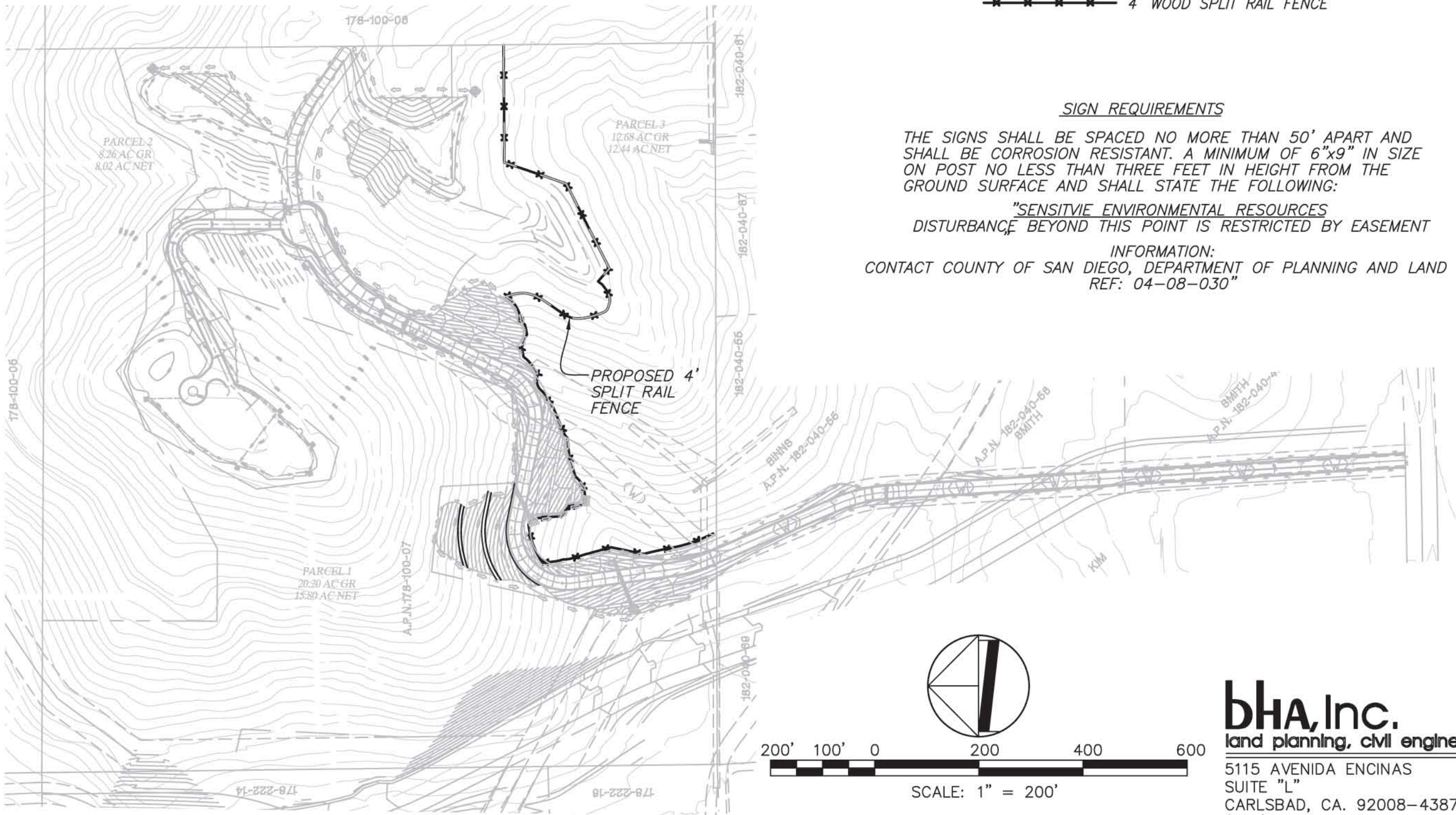
---x---x---x---x--- 4' WOOD SPLIT RAIL FENCE

SIGN REQUIREMENTS

THE SIGNS SHALL BE SPACED NO MORE THAN 50' APART AND SHALL BE CORROSION RESISTANT. A MINIMUM OF 6"x9" IN SIZE ON POST NO LESS THAN THREE FEET IN HEIGHT FROM THE GROUND SURFACE AND SHALL STATE THE FOLLOWING:

"SENSITIVE ENVIRONMENTAL RESOURCES
DISTURBANCE BEYOND THIS POINT IS RESTRICTED BY EASEMENT

INFORMATION:
CONTACT COUNTY OF SAN DIEGO, DEPARTMENT OF PLANNING AND LAND USE
REF: 04-08-030"



APPENDIX 1. FLORAL CHECKLIST OF SPECIES OBSERVED AT THE PIZZUTO SITE**CRYPTOGAMS****Pteridaceae** - Brake Family*Pellaea mucronata* (D.C. Eaton) D.C. Eaton var. *mucronata* Bird's-foot Fern*Pentagramma triangularis* (Kaulf.) Yats. ssp. *triangularis* California Goldenback Fern**DICOTYLEDONS****Adoxaceae** – Adoxus Family*Sambucus mexicana* DC. Blue Elderberry**Aizoaceae** - Carpet-weed Family**Aptenia cordifolia* (L.f.) Schwant. Shrubby Dewplant**Carpobrotus edulis* (Molina) N.E. Brit. Hottentot-fig**Anacardiaceae** - Sumac Family*Malosma laurina* (Torr. & Gray) Abrams Laurel-leaf Sumac*Rhus ovata* Wats. Sugar Bush**Apiaceae** - Carrot Family**Foeniculum vulgare* Mill. Fennel**Asteraceae** - Sunflower Family*Acourtia microcephala* DC. Sacapellote, Purpleheads*Artemisia californica* Less. California Sagebrush*Baccharis pilularis* DC. Coyote Brush*Baccharis salicifolia* (R. & P.) Pers. Mule-Fat*Brickellia californica* (Torrey & Gray) Gray California Brickellbush**Centaurea melitensis* L. Tocalote*Chaenactis artemisiaefolia* (Harv. & Gray) Gray Artemisia Pincushion*Cirsium occidentale* (Nutt.) Jeps. var. *californicum* (Gray) Keil & Tur. California Thistle**Cirsium vulgare* (Savi) Ten. Bull Thistle*Erigeron foliosus* Nutt. var. *foliosus* Leafy Daisy*Eriophyllum confertiflorum* (DC.) Gray var. *confertiflorum* Golden-yarrow**Filago gallica* L. Narrow-leaf Filago*Gnaphalium bicolor* Bioletti Bicolor Cudweed*Gnaphalium californicum* DC. California Everlasting*Gnaphalium canescens* DC. ssp. *beneolens* (Davids.) Stebb. & Keil Fragrant Everlasting*Gnaphalium canescens* DC. ssp. *microcephalum* (Nutt.) Stebb. & Keil White Everlasting*Gnaphalium palustre* Nutt. Lowland Cudweed*Gutierrezia californica* (DC.) Torrey & Gray Broom Matchweed*Hazardia squarrosa* ssp. *grindelioides* (DC.) Clarke Saw-toothed Goldenbush*Helianthus gracilentus* Gray Slender Sunflower*Heterotheca grandiflora* Nutt. Telegraph Weed**Lactuca serriola* L. Wild Lettuce*Pluchea odorata* Cav. Salt Marsh Fleabane**Asteraceae** - Sunflower Family (continued)*Porophyllum gracile* Benth. Odora**Senecio vulgaris* L. Common Groundsel**Sonchus asper* (L.) Hill Prickly Sow Thistle*Stephanomeria virgata* Benth. ssp. *virgata* Virgate Wreath-plant*Venegasia carpesioides* DC. Jesuit Flower

APPENDIX 1. FLORAL CHECKLIST OF SPECIES OBSERVED AT THE PIZZUTO SITE (CONTINUED)**Boraginaceae** - Borage Family*Cryptantha intermedia* (Gray) Greene Nievitas Cryptantha*Cryptantha microstachys* (Greene ex Gray) Greene Small-flower Cryptantha*Plagiobothrys collinus* (Philbr.) J.M. Johnston var. *californicus* (A. Gray) Higgings California Popcornflower**Brassicaceae** - Mustard Family**Hirschfeldia incana* (L.) Lagr.-Fossat Short-pod Mustard**Caprifoliaceae** - Honeysuckle Family*Lonicera subspicata* var. *denudata* Rehd. San Diego Honeysuckle**Caryophyllaceae** - Pink Family**Polycarpon tetraphyllum* (L.) L. Four-leaf Polycarp**Silene gallica* L. Common Catchfly**Stellaria media* (L.) Villars Common Chickweed**Cistaceae** - Rock-Rose Family*Helianthemum scoparium* Nutt. peak rush-rose**Convolvulaceae** - Morning-Glory Family*Calystegia macrostegia* (Greene) Brumm. ssp. *arida* (Greene) Brumm. finger-leaf morning-glory**Cucurbitaceae** - Gourd Family*Marah macrocarpus* (Greene) Greene var. *macrocarpus* Cucamonga manroot, wild-cucumber**Ericaceae** - Heath Family*Arctostaphylos glandulosa* Eastw. ssp. *zacaensis* (Eastwood) Wells Eastwood Manzanita*Comarostaphylis diversifolia* (Parry) Greene ssp. *diversifolia* Summer-holly*Xylococcus bicolor* Nutt. Mission manzanita**Euphorbiaceae** - Spurge Family**Chamaesyce maculata* (L.) Small spotted spurge*Chamaesyce polycarpa* (Benth.) Millsp. small-seed sandmat*Eremocarpus setigerus* (Hook.) Benth. doveweed**Fabaceae** - Legume Family*Lotus scoparius* (Nutt.) Ottley var. *scoparius* coastal deerweed**Fagaceae** - Oak Family*Quercus agrifolia* Neé coast live oak*Quercus berberidifolia* Liebm. scrub oak*Quercus wislizenii* DC. var. *frutescens* Engelm. scrub live oak**Geraniaceae** - Geranium Family**Erodium cicutarium* (L.) L'Hér. red-stem filaree**Hydrophyllaceae** - Waterleaf Family*Eucrypta chrysanthemifolia* (Benth.) Greene var. *chrysanthemifolia* eucrypta*Phacelia grandiflora* (Benth.) Gray large-flowered phacelia**Lamiaceae** - Mint Family**Marrubium vulgare* L. horehound*Salvia apiana* Jeps. white sage*Salvia mellifera* Greene black sage

APPENDIX 1. FLORAL CHECKLIST OF SPECIES OBSERVED AT THE PIZZUTO SITE (CONTINUED)**Lauraceae** - Laurel Family

**Persea americana* L. avocado

Myrtaceae - Myrtle Family

**Eucalyptus camaldulensis* Dehnhardt red gum, river red gum

Onagraceae - Evening-Primrose Family

Camissonia micrantha (Sprengel) Raven small-flowered evening primrose

Polemoniaceae - Phlox Family

Navarretia atractyloides (Benth.) Greene holly-leaf skunkweed

Polygonaceae - Buckwheat Family

Eriogonum fasciculatum Benth. var. *fasciculatum* flat-top buckwheat

Eriogonum fasciculatum Benth. var. *foliolosum* (Nutt.) S. Stokes interior flat-top buckwheat

Portulacaceae - Purslane Family

Claytonia perfoliata Donn ssp. *perfoliata* common miner's-lettuce

Primulaceae - Primrose Family

**Anagallis arvensis* L. scarlet pimpernel

Rhamnaceae - Buckthorn Family

Ceanothus tomentosus C. Parry Ramona ceanothus

Rhamnus ilicifolia Kell. holly-leaf redberry

Rosaceae - Rose Family

Adenostoma fasciculatum Hook & Arn. chamise

Cercocarpus minutiflorus Abrams San Diego mountain-mahogany

Heteromeles arbutifolia (Ait.) M. Roem. Toyon

Rubiaceae - Madder Family

Galium angustifolium Nutt. ex Torrey & Gray ssp. *angustifolium* narrow-leaf bedstraw

Galium nuttallii Gray ssp. *nuttallii* Nuttall's bedstraw

Rutaceae - Rue Family

Cneoridium dumosum (Nutt.) Hook. F. bushrue

Scrophulariaceae - Figwort Family

Antirrhinum coulterianum DC. white snapdragon

Antirrhinum nuttallianum DC. ssp. *subsessile* (Gray) Thompson Nuttall's snapdragon

Diplacus aurantiacus (Curt.) Jeps. ssp. *australis* (McMinn) R.M. Beeks ex Thorne. S D Monkey Flower

Mimulus brevipes Benth. slope monkeyflower

Scrophularia californica Cham. & Schldl. ssp. *floribunda* (Greene) Shaw California figwort

Solanaceae - Nightshade Family

**Nicotiana glauca* Grah. tree tobacco

Solanum douglasii Dunal Douglas' nightshade

Solanum xanti Gray chaparral nightshade

Tamaricaceae - Tamarisk Family

**Tamarix parviflora* DC. European tamarisk

APPENDIX 1. FLORAL CHECKLIST OF SPECIES OBSERVED AT THE PIZZUTO SITE (CONTINUED)**MONOCOTYLEDONS****Arecaceae** - Palm Family

**Washingtonia robusta* Wendle. thread palm

Cyperaceae - Sedge Family

Carex triquetra W. Boott Triangular-fruit sedge

Liliaceae - Lily Family

Hesperoyucca whipplei (Torr.) Baker Our Lord's Candle

Yucca schidigera Ortgies Mojave Yucca

Poaceae - Grass Family

Agropyron parishii Scribn. & Sm.

**Bromus madritensis* L. ssp. *rubens* (L.) Husnot red brome

**Cortaderia jubata* (Lem.) Stapf pampas grass

**Hordeum murinum* ssp. *leporinum* (Link) Arcang. hare barley

Nassella lepida (A.S. Hitchcock) Barkworth foothill needlegrass

**Pennisetum setaceum* Forsk. fountain grass

**Piptatherum miliaceum* (L.) Cosson smilo grass

**Rhynchelytrum repens* (Willd.) Hubb. Natal grass

**Schismus barbatus* (L.) Thell. Mediterranean schismus

**Vulpia myuros* (L.) Gmelin var. *hirsuta* (Hackett) Asch & Graetoner foxtail fescue

* - Denotes non-native plant taxa

APPENDIX 2. ANIMALS OBSERVED OR DETECTED AT PIZZUTO SITE

COMMON NAME	SCIENTIFIC NAME
BUTTERFLIES	
Pieridae (Whites, Sulfurs, Marbles, and Orange-tips) Common White	<i>Pontia protodice</i>
Lycaenidae (Hairstreaks, Coppers, and Blues) Acmon Blue	<i>Icaricia acmon</i>
REPTILES	
Phrynosomatidae Western Fence Lizard	<i>Sceloporus occidentalis</i>
BIRDS	
Accipitridae (Hawks, Eagles, Harriers, Kites) Red-shouldered Hawk Red-tailed Hawk	<i>Buteo lineatus</i> <i>Buteo jamaicensis</i>
Columbidae (Pigeons and Doves) Mourning Dove	<i>Zenaida macroura</i>
Trochilidae (Hummingbirds) Anna's Hummingbird	<i>Calypte anna</i>
Tyrannidae (Tyrant Flycatchers) Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
Corvidae (Jays, Crows, Ravens, Magpies) Western Scrub-Jay American Crow	<i>Apelocoma californica</i> <i>Corvus brachyrhynchos</i>
Aegithalidae (Bushtits) Bushtit	<i>Psaltiriparus minimus</i>
Troglodytidae (Wrens) Bewick's Wren	<i>Thryomanes bewickii</i>
Mimidae (Mockingbirds and Thrashers) Northern Mockingbird	<i>Mimus polyglottos</i>
Sturnidae (Starlings) European Starling	<i>Sturnus vulgaris</i>
Emberizidae (Towhees, Sparrows) Spotted Towhee California Towhee White-crowned Sparrow	<i>Pipilo maculatus</i> <i>Pipilo crissalis</i> <i>Zonotrichia leucophrys</i>
Fringillidae (Finches) House Finch Lesser Goldfinch	<i>Carpodacus mexicanus</i> <i>Carduelis psaltria</i>

APPENDIX 2. ANIMALS OBSERVED OR DETECTED AT PIZZUTO SITE (CONTINUED)

COMMON NAME	SCIENTIFIC NAME
MAMMALS	
Leporidae (Rabbits and Hares)	
Cottontail	<i>Sylvilagus</i> sp.
San Diego Black-tailed Jackrabbit	<i>Lepus californicus bennettii</i>
Sciuridae (Squirrels, Chipmunks, and Marmots)	
California Ground Squirrel	<i>Spermophilus beecheyi</i>
Geomyidae (Pocket Gophers)	
Botta's Pocket Gopher	<i>Thomomys bottae</i>
Canidae (Foxes, Wolves, and Relatives)	
Coyote	<i>Canis latrans</i>

APPENDIX 3. SENSITIVE PLANT SPECIES REPORTED FROM USGS 7.5' SAN MARCOS, VALLEY CENTER, BONSALE AND PALA, CA

SPECIES NAME	STATUS Federal/State/CNPS	HABITAT REQUIREMENTS	PROBABILITY OF OCCURRENCE
<i>Acanthomintha ilicifolia</i> , San Diego Thorn-mint	FT/CE/1B (2-3-2)	Chaparral, coastal scrub, valley & foothill grassland, vernal pools, endemic to active verticol clay soils of mesas & valleys, usu on clay lenses 2/in grassland or chaparral communities, 10-935 m.	Site lacks clay or gabbroic substrates.
<i>Adophia californica</i> , California adolphia	None/None/2 (1-3-1)	Chaparral, coastal sage scrub, valley & foothill grassland, from sandy/gravelly to clay soils within grassland, coastal sage scrub, or chaparral; various exposures, 15-300 m.	Site lacks clay or gabbroic substrates.
<i>Ambrosia pumila</i> , San Diego Ambrosia	FE/None/1B (3-3-2)	Chaparral, coastal scrub, valley & foothill grassland, vernal pools, esp in sandy loam or clay soil, in valleys; persists where disturbance has been superficial, 20-415 m.	Site lacks alluvial substrates.
<i>Arctostaphylos glandulosa</i> <i>ssp crassifolia</i> , Del Mar Manzanita	FE/None/1B (3-3-2)	Chaparral, closed-cone coniferous forest, esp sandy coastal mesas & ocean bluffs, in chaparral or Torrey Pine forest.	Manzanita present on-site is the common interior form
<i>Arctostaphylos rainbowensis</i> , Rainbow Manzanita	None/None/1B (3-3-3)	Chaparral; prev. called <i>A. peninsularis</i> or considered a hybrid between <i>A. glandulosa</i> & <i>A. glauca</i> ; esp usu found in gabbro chaparral in Riverside & San Diego Counties, 270-790 m.	Manzanita present on-site is the common interior form
<i>Brodiaea filifolia</i> , Thread-leaved Brodiaea	FT/CE/1B (3-3-30)	Cismontane woodland, coastal scrub, playas, valley & foothill grassland, vernal pools, usu associated w/annual grassland & vernal pools, often surr by shrubland habitats, clay soils, 35-855 m.	Site lacks clay or gabbroic substrates.

APPENDIX 3. SENSITIVE PLANT SPECIES REPORTED FROM USGS 7.5' SAN MARCOS, VALLEY CENTER, BONSALE AND PALA, CA (CONTINUED)

<i>Brodiaea orcuttii</i> , Orcutt's Brodiaea	FSC/None/1B (1-3-2)	Vernal pools, valley & foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows, esp mesic, clay habitats, sometimes serpentine, in vernal pools & small drainages, 30-1615 m.	Site lacks clay or gabbroic substrates.
<i>Ceanothus verrucosus</i> , Wart-stemmed Ceanothus	FSC/None/2 (2-2-1)	Chaparral, 1-380 m.	Not observed on-site.
<i>Centromadia parryi</i> ssp <i>australis</i> , Southern Tarplant	FSC/None/1B (3-3-2)	Marshes & swamps (margins), valley & foothill grassland, vernal pools, often in disturbed sites near the coast; also in alkaline soils sometimes w/saltgrass; also vernal pools, 0-425 m.	Site lacks alkaline soils.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i> , Orcutt's Pincushion	None/None/1B (2-3-2)	Sandy, undisturbed open chaparral areas.	Interior form of <i>Chaenactis</i> seen.
<i>Comarostaphylos diversifolia</i> ssp <i>diversifolia</i>, Summer Holly	FSC/None/1B (2-2-2)	Chaparral, often in mixed chaparral in California, sometimes post-burn, 30-550 m.	Detected on-site
<i>Eryngium aristulatum</i> var <i>parishii</i> , San Diego Button-celery	FE/CE/1B (2-3-2)	Vernal pools, coastal scrub, valley & foothill grassland, esp in San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools; usu surr by scrub, 15-620 m	Site lacks ephemeral ponds.
<i>Horkelia truncata</i> , Ramona Horkelia	None/None/1B (3-1-2)	Chaparral, cismontane woodland, esp in habitats mixed chaparral, vernal streams, & disturbed areas near roads, clay soil, 400-1300 m.	Present on the property off-site to the north, but not observed on-site.
<i>Lepidium virginicum</i> var <i>robinsonii</i> , Robinson's Pepper-grass	None/None/1B (3-2-2)	Chaparral, coastal scrub. Dry soils, shrubland. 1-945m.	Not observed on-site.
<i>Monardella hypoleuca</i> ssp <i>lanata</i> , Felt-leaved Monardella	None/None/1B (2-2-2)	Chaparral, cismontane woodland, esp. in understory in mixed chaparral, chamise chaparral & so. Oak woodland; esp. sandy soil, 300-1190 m.	Not observed on-site.

APPENDIX 3. SENSITIVE PLANT SPECIES REPORTED FROM USGS 7.5' SAN MARCOS, VALLEY CENTER, BONSALE AND PALA, CA (CONTINUED)

<i>Navarretia fossalis</i> , Spreading Navarretia	FT/None/1B (2-3-2)	Vernal pools, chenopod scrub, marshes & swamps, playas, esp in San Diego hardpan & San Diego claypan vernal pools, in swales & vernal pools, often surr . By other habitat types, 30-1300 m.	Site lacks ephemeral ponds.
<i>Tetracoccus dioicus</i> , Parry's Tetracoccus	FSC/None/1B (3-2-2)	Chaparral, coastal scrub, esp stony fine sandy decomposed gabbro soil, 600-1500 ft.	Site lacks clay or gabbroic substrates.

**APPENDIX 4. SENSITIVE ANIMAL SPECIES REPORTED FROM USGS 7.5' SAN MARCOS,
VALLEY CENTER, BONSALE AND PALA, CA QUADRANGLES**

SPECIES NAME	STATUS Federal/State/CDFG	HABITAT REQUIREMENTS	PROBABILITY OF OCCURRENCE
Western Spadefoot, <i>Scaphiopus [Spea] hammondi</i>	FSC/None/CSC	Grassland habitats, valley- foothill woodlands, requires vernal pools for breeding	Low. Site lacks ephemeral ponds.
Arroyo Toad, <i>Bufo californicus</i>	FE/None/CSC	Semi-arid regions near washes or intermittent streams, incl. Valley- foothill & desert riparian, desert wash, etc., esp rivers w/sandy banks, willows, cottonwoods, sycamores w/loose, gravelly areas	None. Site lacks appropriate habitat.
Southwestern Pond Turtle, <i>Clemmys marmorata</i>	FSC/None/CSC	Permanent or nearly permanent water in many habitat types; below 6000 ft, esp w/basking sites	None. Site lacks appropriate habitat.
San Diego Horned Lizard, <i>Phrynosoma coronatum blainvillei</i>	FSC/None/CSC	Coastal Sage Scrub, Chaparral in arid and semi-arid climate, esp. friable, rocky, or shallow sandy soils	Moderate. Appropriate habitat located on-site, but primary food source not detected.
Coronado Skink, <i>Eumeces skiltonianus interparietalis</i>	FSC/None/CSC	Grassland, chaparral, pinon-juniper sage woodland, pine-oak & pine forests in coastal ranges in so. Calif., esp prefers early successional stages or open areas, found in rocky areas close to streams & on dry hillsides	None. Site lacks appropriate habitat.
Orange-throated Whiptail, <i>Cnemidophorus hyperythrus beldingi</i>	FSC/None/CSC	Coastal Scrub (low elev.), Chaparral, Valley-foothill Hardwood, esp washes & sandy areas w/patches of brush & rocks	Moderate. Appropriate habitat located on-site, but is dense.
Coastal Western Whiptail, <i>Cnemidophorus tigris multiscutatus</i>	FSC/None/None	Deserts & semiarid areas w. sparse vegetation & open areas, also in woodland & riparian areas, esp. where ground may be firm soil, sandy, or rocky	Low-Moderate. Could occur within the chaparral habitat on-site.

APPENDIX 4. SENSITIVE ANIMAL SPECIES REPORTED FROM USGS 7.5' SAN MARCOS, VALLEY CENTER, BONSALE AND PALA, CA QUADRANGLES (CONTINUED)

Coastal Rosy Boa, <i>Charina trivirgata</i>	FSC/None/Protected	Desert & chaparral from coast to Mojave & Colorado deserts, esp in moderate to dense vegetation & rocky cover; habitats w/mix of brushy cover & rocky soil like coastal canyons & hillsides, desert canyons, washes & mountains	Low-Moderate. Could occur within the chaparral or sage scrub habitats on-site.
Northern Red-diamond Rattlesnake, <i>Crotalus ruber ruber</i>	FSC/None/CSC	Chaparral, woodland, grassland & desert areas, esp in rocky areas & dense vegetation	Moderate. Chaparral on-site is extremely rocky.
California Least Tern, <i>Sterna antillarum browni</i>	FE/SE/None/C	Nests along coast, esp colonial breeder on bare flat substrates, sand beaches, alkali flats, paved areas	None. Site lacks appropriate habitat.
Burrowing Owl, <i>Athene [Speotyto] cunicularia</i>	FSC/None/CSC	Found in open dry annual or perennial grasslands, desert and scrublands w/low growing vegetation, uses ground squirrel burrows for nesting	Low. The site lacks clearings and is extremely dense.
White-faced Ibis, <i>Plegadis chihi</i>	None/None/CSC	Freshwater marshes, occasional inhabits brackish water.	None. Site lacks appropriate habitat.
Cooper's Hawk <i>Accipiter cooperi</i>	None/None/CSC	Woodland, usu. Open, interrupted or marginal type, nests mainly in riparian areas	Detected on-site.
Red-shouldered Hawk <i>Buteo lineatus</i>	None/None/None	Woodlands, forests, urban canyons; forages at edges of open habitats.	Detected on-site.
Golden Eagle, <i>Aquila chrysaetos</i>	None/None/SOC	Foothills, mountains grasslands, deserts, and shrub habitats.	
Western Willow Flycatcher, <i>Empidonax traillii extimus</i>	FE/SE/None/CSC	Extensive thickets of low, dense willows, often near streams; 2000-8000 ft elev.	None. Site lacks appropriate habitat.
Coastal Cactus Wren, <i>Campylorhynchus brunneicapillus couesi</i>	None/None/CSC	Southern California coastal sage scrub, esp w/tall opuntia cactus for nesting	None. Site lacks appropriate habitat.
California Gnatcatcher, <i>Polioptila californica californica</i>	FT/None/CSC/C	Coastal sage scrub, below 2,500 ft in So. California, esp low coastal scrub in arid washes, mesas & slopes	Low. Sage scrub habitat on site is of low quality and habitat value.

APPENDIX 4. SENSITIVE ANIMAL SPECIES REPORTED FROM USGS 7.5' SAN MARCOS, VALLEY CENTER, BONSALE AND PALA, CA QUADRANGLES (CONTINUED)

Least Bell's Vireo, <i>Vireo bellii pusillus</i>	FE/CE/None	Summer resident in So. Calif., inhabits low riparian growth in vic. Of water or in dry river bottoms, below 2000 ft, usu. Willow, baccharis mesquite	None. Site lacks appropriate habitat.
Yellow Warbler, <i>Dendroica petechia brewsteri</i>	None/None/SC	Riparian plant associations, prefers willows, cottonwoods, aspens, sycamores & alders for nesting and foraging, esp nests in montane shrubbery in open conifer forests.	None. Site lacks appropriate habitat.
Yellow-breasted Chat, <i>Icteria virens</i>	None/None/CSC	Summer resident in riparian thickets of willow & other brushy tangles near watercourses, nests in low, dense riparian habitat.	None. Site lacks appropriate habitat.
Southern California Rufous-crowned Sparrow, <i>Aimophila ruficeps canescens</i>	FSC/None/CSC	Coastal sage scrub, sparse chaparral, esp rel. steep, often rocky hillsides w/grass & forb patches	Moderate. Could occur in either the sage scrub or chaparral located on-site.
Western Mastiff Bat, <i>Eumops perotis</i>	FSC/None/CSC	Small colonies in rocky cliffs or crevices. Variety of open habitats including woodlands, coastal sage scrub, grasslands, chaparral, desert scrub, and urban.	Low. Site is rocky, but rocks are more bouldery and lack crevices for the most part.
Stephens' Kangaroo Rat, <i>Dipodomys stephensi</i>	E/T/None	Annual & perennial grasslands, also coastal scrub, sagebrush, esp w/buckwheat, chamise, brome grass & filaree; will burrow into firm soil.	Low. Site does not contain grassland and sage scrub on site has low wildlife habitat value.
San Diego Desert Woodrat (<i>Neotoma lepida intermedia</i>)	FSC/None/FSC	Mixed and chaise-redshank chaparral, sagebrush and other habitats. Prefers rocky areas to build stick nest.	Moderate. Could occur in either the sage scrub or chaparral located on-site.
San Diego Black-tailed Jackrabbit <i>Lepus californicus bennettii</i>	FSC/None/CSC	Variety of habitats including coastal sage scrub, chaparral, & desert scrub.	Observed on the site.

DEFINITIONS OF SENSITIVITY RATINGS

CNPS Lists	
List 1A	Plants Presumed Extinct in California
List 1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
List 2	Plants Rare, Threatened, or Endangered in California But More Common Elsewhere
List 3	Plants About Which We Need More Information--A Review List
List 4	Plants of Limited Distribution--A Watch List
CNPS R-E-D Code	
<u>R (Rarity)</u>	
1	Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time
2	Distributed in a limited number of occurrences, occasionally more if each occurrence is small
3	Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported.
<u>E (Endangerment)</u>	
1	Not endangered
2	Endangered in a portion of its range
3	endangered throughout its range
<u>D (Distribution)</u>	
1	More or less widespread outside California
2	Rare outside California
3	Endemic to California
State-Listed/Designated Species	
CE	State-listed, endangered
CT	State-listed, threatened
CR	State-listed, rare
CC	Candidate for State listing
CSC	California Special Concern species (Department of Fish and Game)
Federally-Listed/Designated Species	
FE	Federally-listed, endangered
FT	Federally-listed, threatened
FPT	Federally-proposed, endangered
FSC	Federal Special Concern Species



Photo #1. View of the Diegan Coastal Sage Scrub located west of the access road on-site. Looking southwest.



Photo #2. Typical view of the chaparral vegetation located on-site. Looking east.



Photo #3. View of one of the disturbed areas on-site. Looking northwest.



Photo #4. View of Diegan Coastal Sage Scrub in the foreground and Southern Mixed Chaparral in the background. Looking east.



Pacific Southwest Biological Services, Inc.

P.O. Box 985, National City, California 91951-0985 • (619) 477-5333 • FAX (619) 477-5380

January 28, 2008
PSBS #U407

TO: Director, Department of Planning and Land Use
County of San Diego County

FROM: R. Mitchel Beauchamp, President
Pacific Southwest Biological Services, Inc.

RE: Pizzuto Tentative Parcel Map, TPM 20846 RPL⁵, Availability of Mitigation
Credits (Log No. 04-08-030)

As requested in the January 7, 2008 correspondence (#4.), you required that the applicant "...indicate one or more banks where at least 2.08 acres of coastal sage scrub and 14.90 acres of mixed chaparral habitat are available for purchase."

Based on a telephone conversation with Mr. Darren Parker of the City of Escondido (760-477-5380), the City of Escondido Daley Ranch Conservation Bank has the available credits available for purchase. Furthermore, the project applicant, Sylvia Pizzuto is in the process of submitting an application for the purchase of Daley Ranch Conservation Bank Credits as required by the mitigation measures for TPM 20846 RPL⁵.

If you have any questions regarding this correspondence, please do not hesitate contacting me at (619) 477-5333.



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October 14, 2008
PSBS #U407B

TO: Marissa Smith, Project Manager, Department of Planning and Land Use

FROM: Michael Evans, Director of Operations, Pacific Southwest Biological Services

RE: Pizutto Minor Subdivision; Tentative Parcel Map, TPM 20946/ER04-08-030
Application Amendment: Responses to Biology-Related Issues, DPLU Letter
of October 2, 2008

Comment	Issue	Response
1.	Brow ditch in open space.	The engineer has informed us that this is an artifact based on scale of the map; the brow ditch is shown for illustration purposes only and is not meant to be in the open space.
2.	Text and Appendix correspondence (sensitive species).	Appendices 2 and 4 have been amended and discussion changed on page 9 of report.
3.	San Diego Black-tailed Jackrabbit discussion.	Text has been amended as requested